

#### **Job Information**

Job #: 94949 Date: November 30,

2018

Priority: — Authorized OT: No Authorized by:

### **Customer Information**

Name: COORSTEK Reason:

Contact: Motor#: PO#:

Application: – Special notes:

#### **Name Plate Information**

Manufacturer: HOWELL Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled
Serial#: TYPE BAK Model#: 085-01331-02

Service Factor: 1.15 Frame: 6284UZB

Horsepower/kW: 10 Rated RPM: 1150

Rated Amps: 26.6/13.3 Rated Voltage: 230/460

Phase: 3 Cycles: 60

No

Nameplate DE ODE F1 F2 Top



Special design:











Fax 901-873-5301

Not

Available



## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): None

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device No Contaminant Image:

present?:

Shaft runout(TIR-Inbound):

Type of grounding device:

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 7213

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6310

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Not Available



## **Mechanical Inspection (Continued)**

Lubrication Type: Grease Thermal Protection device DE: -

Lubrication brand inbound: Mobile Polyrex EM Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full Grease Cond. DE: New

Grease Amt ODE: Full Grease Cond. ODE: New

Seals DE type: Slinger Seals Image:

Seals DE size:

Not
Available

Seals DE (inbound) condition :

Seals Image 2:

Seals ODE type: Slinger Not

Seals ODE size:

Seals ODE (inbound) condition

Shaft damage cause: None Shaft Image:



# **Mechanical Inspection (Continued)**

Brg. Image:



Bushings/sleeves image:

Not Available

Water jacket: Ok



Fan: Ok



Endbell Image:

Frame cond.:

Good



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Single piece

Missing parts?

☐ J-Box cover

O-rings

☐ J-Box

☐ HH cover

Glands

✓ None

`



Other missing parts



### **Mechanical Inspection (Continued)**

#### Air Gap Meaurements (N/A on Single Piece Endbell)

Does Air Gap Meet Customer or EASA spec(<10% variation)?

DE @ 0 ODE @ 0 —

DE @ 90 ODE @ 90

DE @ 180 ODE @ 180

DE @ 270 ODE @ 270

### **AC Electrical Inspection**

Number of leads: 3 Terminal Markings:

Length of leads: 8" REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal

Markings Identified By Color:

Size of leads: 1-Blue 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Good 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: — Terminal Lugs

Not Not Lug Attachment: — Available Available

Lug size:



# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars:

Num broken bars:

Rotor



#### **Rotor Test Results**

**Rotor Condition:** 

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







## **AC Electrical Inspection (Continued)**

Winding color: Like new Winding image Winding Thermal Protection: Yes

Winding condition: Solid

Winding Thermal Protection DE:

Winding Thermal
Protection ODE:

Stator test results: Salvageable

Megs incoming: Good Surge incoming: Good Hi-pot incoming: Good

**Winding Resistance Incoming** 

Phases A to B Phases B to C Phases C to A Resistive imbalance

Incoming 1.070 1.067 1.073 0.3

Leads/jumpers: Ok

If other, leads/jumpers:

# **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good Bearings Retainer: Yes

Type of grounding device: Bearing DE Size: 7213

Shaft runout(TIR-Inbound): Bearing ODE Size: 6310

Retainer condition: —

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# **Mechanical Inspection (Continued)**

Seals DE condition :	Worn	Brg. Seats DE:	Good	
Seals DE type:	Slinger	If DE undersized, amt.:		
Seals DE size:		Brg. Seats ODE:	Good	
Seals DE (inbound) condition :		If ODE undersized, amt.:		
Seals ODE condition :	Worn	Shaft damage:	OK	
Seals ODE type:	Slinger			
Seals ODE size:		Bushings/sleeves DE:	Ok	
Seals ODE (inbound) condition :		Bushings/sleeves ODE:	Ok	
Endbell fits/damage:	Good	Foot/Flange condition:	Ok	
Endbell DE size:		Foot flatness:	Pass	
Endbell DE insulated?:	_	Does Air Gap Meet Cu	Does Air Gap Meet Customer or EASA spec(<10% variation)?	
Endbell ODE size:		variation)?		

Endbell ODE insulated?:

Robert Willery



### Conclusion

**Component Failure** 

**Cause of Failure** 

#### **Comments**

Ode bearing housing fit bad found flutting in Bearings needs Ageis Ring

Service Tech name: Robert Wiley

Service Tech signature: